#### In the Specification

### Please replace paragraph [0054](mislabeled [0010]) with the following:

· On dendritic cells (DC) (Marcinkiewicz J. et al., 1999).

Two hours pre-incubated rat DCs with TauCl underwent a concentration-dependent inhibitory activity. Thus, a TauCl concentration equal to 500 μM ((TauCl) = 500 μM) almost completely inhibits the DC release of reactive oxygen agents (ROS) generated via a respiratory burst, PGE<sub>2</sub>, nitric oxide. TNF-α, IL-6, IL-10, and IL-12. addition. In the lipopolysacharide lipopolysacharide induced expression of MHC type II and molecule B7-2 is also inhibited. At this concentration, TauCl may be toxic to DC when they are exposed for a long time. With  $(TauCl) = 250 \mu M$ , TauCl has a more selective action. Therefore, it inhibits the production of IL-10, IL-12, PGE<sub>2</sub>, and nitric oxide. TNF-α and ROS generation is not inhibited. In addition, a DC exposition to TauCl seems to promote a TH1 response and decreases the TH2 activity.

## Please replace paragraph [0059] with the following:

TauCl and taurine inhibit superoxide anion  $(O_2)$  production by stimulated neutrophils. This inhibition involves a different mechanism than those implicated in TauCl formation (i.e., association of the taurine (or TauCl) with a <u>myeloperoxydasemyeloperoxidase</u> specific inhibitor generates a synergic effect).

## Please replace paragraph [0063] with the following:

#### · On fibroblasts.

In rheumatoid arthritis patients, TauCl inhibits fibroblast-like synoviocyte proliferation and decreases the activity of major transcriptional factors of both IL-6 (IC<sub>50</sub>  $\sim$  225  $\mu$ M) and IL-8 (IC<sub>50</sub>  $\sim$  450  $\mu$ M) in a dose-dependent manner. Thus, TauCl reduces both IL-6 proinflammatory action and immune cell ability to migrate within an inflammatory site (*via* an IL-8 inhibition). Whereas IL-6

inhibition is independent of the fibroblast stimulating agent used (e.g. TNF- $\alpha$ , IL-1 $\beta$  or IL-17), IL-8 inhibition is dependent on the stimulation via TNF- $\alpha$  or IL-1 $\beta$ , but not via IL-17. This shows different signaling pathways from TNF- $\alpha$ /IL-1 $\beta$  and IL-17 triggered-transduction (Kontny E et al., 1999). These signaling pathways are dependent on two transcription factors: NF- $\kappa$ B and AP-1. In addition, TauCl inhibits both spontaneous and bFGF-stimulated syno-viocyte proliferation (Kontny E et al., 2000).

#### Please replace paragraph [0065] with the following:

· On transcription factors NF-KB and AP-1.

NF-κB-dependent gene expression may be altered by TauCl activity. In IL-1β-stimulated human synoviocytes, transduction-TauCl-inhibition of IL-6 and IL-8 transduction is executed *via* a DNA-bonding ability reduction of NF-κB and AP-1. IL-6 transcription is under a NF-κB control, while both NF-κB and AP-1 control IL-8 transcription. Thus, a (TauCl) = 250 μM selectively reduces the DNA-bonding of NF-κB (*i.e.*, the IL-6 transcription) without altering AP-1 DNA-bonding (*i.e.*, the IL-8 transcription). TauCl acts on both NF-κB and AP-1 transcription factors to inhibit the IL-6 and IL-8 transduction. At 500 μM, TauCl decreases the DNA-bonding activity of both NF-κB and AP-1 (*i.e.*, the transcription of IL-6 and IL-8 is reduced)(Kontny E *et al.*, 2000). These two transcription factors are regulated *via* a redox mechanism ((Sen C.K., Packer L., Fased J. 1996; 10:709-20), (Li N. & Karin M., Fased J. 1999; 13:1137-43), (Kunsch C. & Medford R.M., Circ Res. 1999 Oct 15; 85(8):753-66.)). It seems that TauCl may interfere the intracellular redox status of these transcription factors and, therefore, some anti-inflammatory properties may be suggested from TauCl (Kontny E *et al.*, 2000).

#### Please replace paragraph [0069] with the following:

This invention also relates to a method of preparing a pharmaceutical composition including mixing (1) at least one halogenated compound and (2) at least one zwitterionic compound and/or at least one amino acid or their derivatives, (3) and optionally at least one excipient, to obtain at least one N-halogenated derivative, and at least one halogenated compound in a sufficient therapeutic amount to not substantially stimulate myeloperoxidase activity in a mammal.

### Please replace paragraph [0071] with the following:

I have discovered that in inflammatory sites, beyond any bactericidal activity, NaOCl contributes to (1) an increase in the transition to the cleansing of necrotic and suppurating mass, (2) stimulate[[s]] local immunity and (3) activate[[s]] the tissue regeneration process. These abilities are induced from sodium hypochlorite (*i.e.*, hypochlorous acid (HOCl) properties and the hydrolysis generated from sodium hydroxide (NaOH)) and its N-chlorinated derivatives.

# Please replace paragraph [0079] with the following:

The N-chloramine titer of the invention composition is preferably less than or equal to abutabout 5 moles/liter, and may be adapted to clinical use. Usefully, the invention composition contains an N-halogenated derivative, such as the taurine N-chloramine, with a concentration between about 5 moles/liter and about 0.01 femtomoles/liter. Preferably, the invention composition contains a N-halogenated derivative such as the taurine N-chloramine, q.s. with a minimum titer greater than or equal to about 0.01 femtomoles/liter.

# Please replace paragraph [0093] with the following:

In case the <u>stoichimetrystoichiometry</u> is 1/1 and with a complete reaction (*e.g.*, between hypochlorous acid and taurine), the hypochlorite titer of the first active solution is preferably lower than or equal to about 6 moles/liter of available chlorine, and must be adapted both to the Zw/Aam molecule amount of the second solution and to clinical status. In this preparation method, the halide

solution (i) favorably contains an alkaline metal hypochlorite. Even more preferably, the haloid solution (i) contains sodium hypochlorite *q.s.* with an available chlorine titer between abutabout 6 moles/liter and about1,000.01 femtomoles/liter. The taurine titer of the second solution (iii) of this invention preparation method is preferably lower than or equal to about 1 moles/liter and may be adapted to clinical use. It is useful for the second solution (iii) of this invention preparation method to have a taurine concentration between about 5 moles/liter and about 0.01 femtomole/liter. Even more preferably, the second solution (iii) of this preparation method has a taurine titer greater than or equal to about 0.01 femtomole/liter.

#### Please replace paragraph [0113] with the following:

The invention more particularly concerns the local treatment of lesions and infections linked to chronic and/or acute parodontitisperiodontitis. Thus, the invention composition is usefully adapted for irrigation of periodontal pockets, with the aim for removing these periodontal pockets as the composition has both antiseptic and anti-inflammatory activities, and acts as an immunity modulator and healing stimulator of periodontal tissues (i.e., alveolar bone, alveolodental ligament and gingiva).